UCRL-AR-103195

Environmental Protection Department
Operations & Regulatory Affairs Division

Monitoring Program for New Underground Storage Tanks 611-G1U1, 611-G2U1, 611-D1U1, and 611-O1U1

March 1992

Wastewater and Tank Systems Group

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Introduction

The purpose of this document is to provide a routine monitoring program for Underground Storage Tanks 611-G1U1, 611-G2U1, 611-D1U1, and 611-O1U1. The program will help ensure detection of and response to an unauthorized release in the shortest time possible.

In compliance with California Code of Regulations, Title 23, Division 3, Chapter 16, Article 3, Section 2632, Subsection (e) (included as Appendix A of this document), the program includes:

Appendix A
23 CCR 2632(e)

- A monitoring procedure.
- A response plan for the removal of an unauthorized release.
- A description of the reporting format to be followed should such a release occur.

Responsible Personnel

The Operator of Underground Storage Tanks 611-G1U1, 611-G2U1, 611-D1U1, and 611-O1U1 is the Lead Supervisor for Maintenance Mechanics. The Operator's telephone number is (510) 422-7476. The Operator should maintain a copy of this monitoring program at the tank location so it can be reviewed during regulatory agency inspections.

The Environmental Analyst assigned to provide environmental support to the program owning each of these tanks is a member of the Environmental Operations Group in the Operations and Regulatory Affairs Division of the Environmental Protection Department (EPD) and is a member of the Hazards Control Safety Team.

The Hazardous Waste Management (HWM) Division personnel of the EPD pick up properly packaged and identified hazardous waste from waste accumulation areas and from retention tanks for temporary storage, repackaging, treatment, preparation for transport, shipment for disposal, or recycling.

The Wastewater and Tank Systems (WATS) Group in the Operations and Regulatory Affairs Division is responsible for providing guidance on tank compliance issues and for interfacing with the appropriate regulatory agencies on these issues.

Description of Tank Systems

Underground Storage Tanks 611-G1U1, 611-G2U1, 611-D1U1, and 611-O1U1 are located on the southeast side of Bldg 611 (Fig. 1). Each tank system was installed in 1986 to provide gasoline and diesel fuel for LLNL motor pool vehicles and to provide storage for waste oil generated at the Bldg 611

maintenance garage facility. Building 611 is occupied by the Vehicle and Mail Services Division.

Each tank is constructed of fiberglass and was made by Owens/Corning. The volume and content of each primary tank are:

- Tank 611-G1U1 = 12,000 gallons regular gasoline.
- Tank 611-G2U1 = 12,000 gallons unleaded gasoline.
- Tank 611-D1U1 = 10,000 gallons diesel.
- Tank 611-O1U1 = 1,000 gallons waste oil.

Each tank is double-walled, consisting of a smaller, primary tank that contains the fuel product nested inside a larger, encasing secondary tank. The space enclosed between the two tank walls is the tank's annular space.

The piping is also considered a part of the tank system. Like the tank, the piping is double-walled, the primary piping being surrounded by a secondary piping. The secondary piping is connected to a piping containment sump.

Monitoring Procedures

Monitoring procedures in accordance with 23 CCR 2632(e)(1) in Appendix A include both a continuous electronic monitoring and a weekly manual monitoring. The electronic monitoring equipment is tested and maintained through annual checks.

Electronic Monitoring of Tank Systems

Each tank is electronically monitored at all times by an Owens/Corning Hydrostatic Monitor, which uses a liquid-level indicator (Reservoir Model R-7, Electronic Control Panel Model SB0014). The monitor works on the concept of hydrostatic head pressure.

The secondary tank is filled with water and connected through piping to an above-grade water reservoir box, which creates a head pressure in the underground secondary tank. Thus, if there is a leak in the primary tank wall, water from the secondary tank will drain into the primary tank, as opposed to the product leaking into the secondary tank. Consequently, the water level of the above-grade reservoir will drop, causing the liquid-level indicator in the reservoir box to activate the monitor's audio-visual alarm. The reservoir box and the alarm panel are mounted on the south wall of Bldg 611, Room 1125 (see Fig. 1).

Each tank's piping also is electronically monitored at all times, in this case with a Universal Leak Alert System, which uses a hazardous-substance liquid sensor (Alarm Panel Model LA-04, Liquid Probe Model LALS-1). The liquid sensor is placed in the piping-containment sump above the tank and connected with electrical conduit to the sensor's audio-visual alarm panel. If there is a leak in the primary piping wall, the product will drain into the secondary piping. From the secondary piping, the product will drain into a piping-containment sump. When the product covers the sensor's liquid-sensitive probe in the sump, the alarm will activate. The alarm panel for the liquid sensor is mounted on the south wall of Bldg 611 (see Fig. 1).

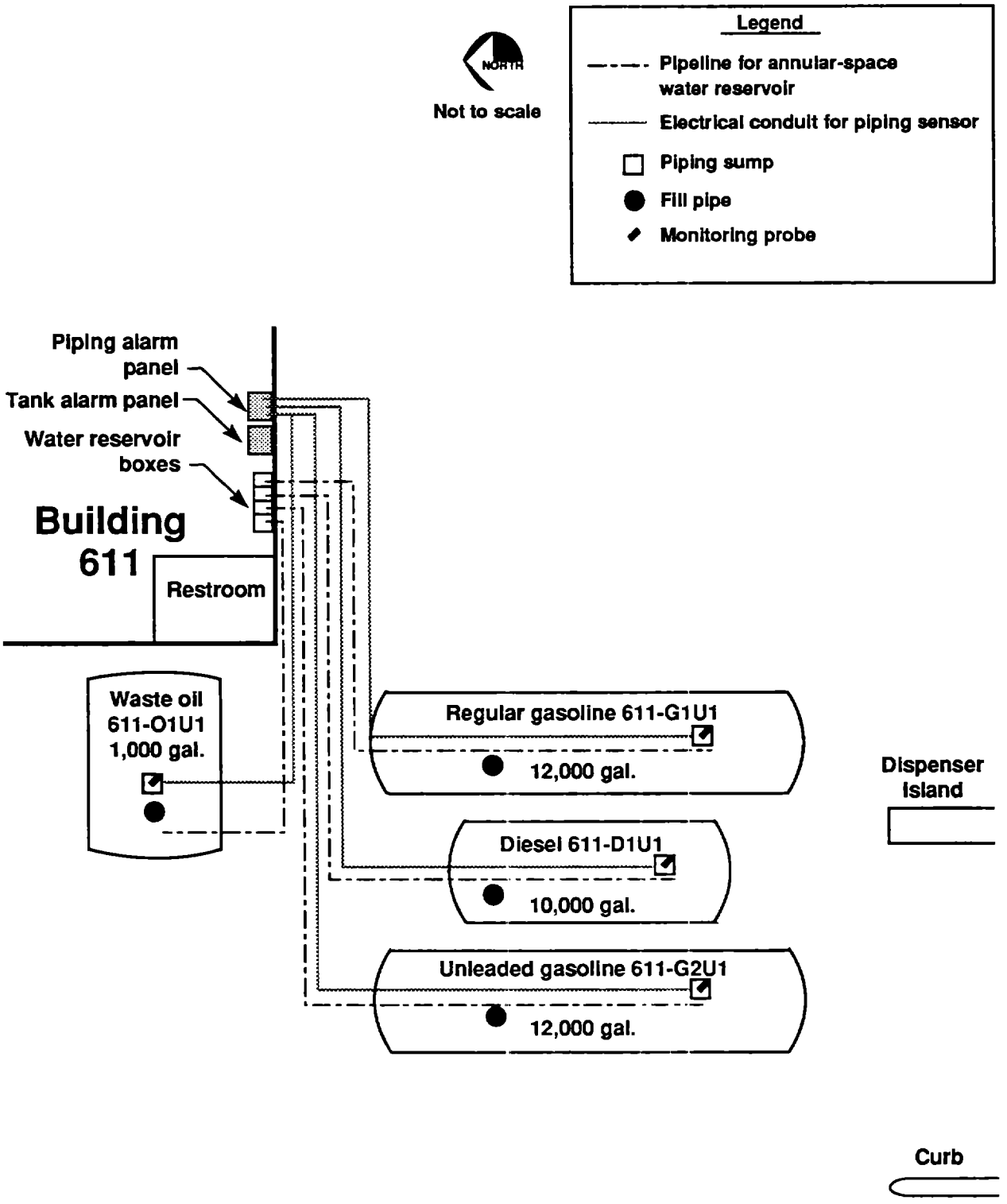

Figure 1. Building 611 and associated tank systems.

Manual Monitoring of Water Level in Primary Tank

During normal tank operation, it is possible to have a small amount of water in the primary tank. A portion of the water might be derived from condensation occurring in the tank's air space. Because the water is heavier than the product fuel, the water sinks to the bottom of the tank. It is important to measure the water level because a significant increase in water, compared with that measured in preceding weeks, indicates that water from the secondary tank might have entered the primary tank through a leak in the wall.

Appendix B Operator's Monitoring Report

The Operator is responsible for monitoring the water level in the tank each week and for entering the results on the *Operator's Monitoring Report* (see Appendix B).

The depth of the water layer is measured by applying a water-sensitive paste to the end of a dipstick and lowering the dipstick through the fill pipe straight down to the bottom of the primary tank. (The dipstick and the water-sensitive paste are located in the maintenance garage area of Bldg 611.) The paste is insensitive to the product and, therefore, will react (by changing color) from the bottom of the tank only up to the top of the water.

Equipment Maintenance

Once a year, the Operator must schedule a test of the following equipment and arrange for repair, if needed:

- Tank annular-space leak detector.
- Piping annular-space leak detector.

All equipment tests and repairs must be recorded on the *Operator's Monitoring Report.*

Operational Training—Tank System and Monitoring Equipment

The Operator will read and document that he or she has read the following instruction manuals:

- Owens/Corning Double-Wall Fiberglas® Tanks for Underground Petroleum Storage.
- Leak Alert System Operational Instruction Manual for the LA-01/LA-02 System.

The Operator will also read and document that he or she has read this monitoring program. The instruction manuals and the monitoring program will be kept at the tank system location for handy reference.

Appendix C Training Documentation

Owens/Corning manufacturer's representatives will also review the tank system operation with the Operator, and this review will be documented. Training documentation will be attached to the Operator's Monitoring Record when it is completed. A copy of a training documentation sheet is available in Appendix C.

Response Plan for Unauthorized Release

If an alarm is generated from either the tank or the piping, the following response plan is to be followed [in compliance with 23 CCR 2632(e); see Appendix A]. The Operator is responsible for implementing the response plan.

Alarm Responses

Initial procedures to respond to an alarm from the tank or piping are described as follows.

Tank alarm

If there is a tank alarm, the Operator must inspect the water level in the reservoir box to determine whether a leak has occurred. If the reservoir has drained, the reservoir must be refilled to confirm that the system is actually leaking. If the reservoir drains again, the system has a leak At this point, the Operator must notify the Environmental Analyst of the alarm.

The next step is to determine whether the leak is in the primary or secondary tank wall. To determine if the leak is in the primary tank wall, the water level in the primary tank should be measured following the procedure described in the previous section "Manual Monitoring of Water Level in Primary Tank." A significant increase in the water level, compared with levels measured in immediately preceding weeks, confirms that there is a leak in the primary tank's wall.

Appendix D 23 CCR 2632(c)(2)(C)

If there is a leak, the determination of the presence of a hazardous substance such as diesel should be specified, in accordance with 23 CCR 2632 (c)(2)(C) (included as Appendix D of this document). The Operator would confirm a leak into the primary tank wall by noting an increase in the water level of this tank. Very little diesel should flow into the secondary tank. However, if diesel were to make its way into the secondary tank, the diesel would rise to the top of the reservoir box, where it could be detected by its odor or visual sheen. If such detection is made, a sample of fluid in the reservoir box should be taken to verify the presence of diesel in the secondary tank system. The Operator should contact the Environmental Analyst for sampling guidance.

Appendix E Owens/Corning Reservoir Troubleshooting Guide

To determine whether the leak is in the secondary tank wall, and for all other suspected system leaks, the Operator should consult the *Owens/Corning Reservoir Troubleshooting Guide* (see Appendix E). The troubleshooting guide was developed as an aid for determining the nature of a leak.

If a leak is confirmed in either the primary or the secondary tank, the Operator must follow the procedures described in the "Removal Procedures" section of this document. Also, the Environmental Analyst will notify the WATS Group, who will then make the appropriate notifications as described in the section "Reporting Format."

Piping alarm

In the event of a piping alarm, the Operator must inspect the piping containment sump for the presence of product. The piping sump is located opposite

the fill pipe on top of the tank. The presence of product in the sump, detected by its odor, indicates that there is a leak in the piping. A sample of fluid from the piping sump should be taken to confirm that diesel is present. The Operator must notify the Environmental Analyst of the alarm and of the need to take a sample.

If a leak is confirmed, the Operator must follow the procedures described in the "Removal Procedures" section of this document. Also, the Environmental Analyst will notify the WATS Group, who will then make the appropriate notifications as described in the section "Reporting Format."

False alarm

If, after responding to an alarm, the Operator determines that there is no leak, the Operator must arrange for the alarm system to be checked and, if necessary, repaired to prevent recurrence of a false alarm. A false tank alarm could be the result of air pockets, evaporation, or excessive thermal contraction. The Operator must record all false alarms on the *Operator's Monitoring Report.*

Removal Procedures

Leaks in either the primary tank, the secondary tank, or the piping might require removal of some or all of the product from the tank system. The specific removal procedures are dependent upon the location of the leak in the tank system. The Operator and the Environmental Analyst must authorize the start of removal procedures. The actual removal operation is the responsibility of EPD's HWM Division.

Removal equipment

The Operator and the Environmental Analyst will determine what equipment will be used for the removal operation. If a vacuum tank truck is necessary, the Operator must contact the HWM Shipping Coordinator [telephone no. (510) 423-1996], who will make the necessary arrangements with an appropriate hazardous waste hauler. HWM currently holds contracts with the following hazardous waste haulers that could perform removal operations:

IT Corporation	MP Vacuum
1680 Rogers Ave.	3400 N. Manor St.
San Jose, CA	Bakersfield, CA

IT Corporation is available on a 24-hour basis and MP Vacuum is available during business hours.

Primary tank leak

A leak in the primary tank will cause water from the secondary tank to drain into the primary tank. The contents of the primary and secondary tanks must be pumped into an aboveground portable tank or container and properly disposed of according to applicable laws and regulations. The tank system must remain out of service until the primary tank is repaired.

Secondary tank leak

If there is a leak in the secondary tank, the water in that tank will drain into the surrounding backfill material. The contents of the primary and secondary tanks must be pumped out, separately, into aboveground portable tanks or containers. The tank system must remain out of service until the secondary tank is repaired.

Piping leak

If there is a leak in the primary piping, the contents of the piping sump must be pumped immediately into an aboveground portable tank or container and properly disposed of according to applicable laws and regulations. The piping must be tested to determine the location of the leak and must remain out of service until the leak is repaired. It is not necessary to pump out the tanks or to cease use of the tanks while the piping is being repaired.

Tank Repairs

The Operator must contact the tank manufacturer for repairs. Tank repairs should be performed only by authorized tank-manufacturer repair personnel.

Reporting Format

Different procedures are used to report the following different types of operations:

- Normal operations.
- Unauthorized releases.
  - — Recordable releases.
  - — Reportable releases.

Normal Operations: Operator's Monitoring Report

The *Operator's Monitoring Report* must be used to record

- Water levels in the primary tank.
- All monitoring equipment maintenance.
- All false alarm responses.

Because the daily task of monitoring for leaks is performed continuously by electronic systems, the *Operator's Monitoring Report* can be submitted quarterly to the WATS Group. The report must be submitted within five (5) working days after the end of the quarter, and the WATS Group will keep the report on file for a minimum of three (3) years.

Unauthorized Releases

The WATS Group is responsible for maintaining all records and reports of unauthorized releases. The WATS Group is also responsible for preparing and sending the required reports to the appropriate regulatory agencies whenever an unauthorized release occurs.

In order for reports to be sent to the regulatory agencies within the required time periods, the Operator must provide the Environmental Analyst with all pertinent information within the time specified for each type of release (as discussed in the next two sections). The Environmental Analyst then must immediately relay the information to the WATS Group. Any questions pertaining to these reporting procedures should be directed to the WATS Group [telephone no (510) 423-7417]

Depending on its severity, an unauthorized release is reported either as a recordable release or a reportable release.

Recordable release

Appendix F Health and Safety Code, Section 25294

A *recordable* release is one that poses no threat to the surrounding environment. Examples are a leak from the secondary tank into the primary tank, a leak from the primary piping into the secondary piping and piping sump, overspills, or overfills. Recordable is defined in the California Health and Safety Code, Division 20, Chapter 6.7, Section 25294 (see Appendix F). To be classified as a recordable release, an unauthorized release must meet *all* of the following criteria:

- Cleanup can be performed within 8 hours after the release was detected or should reasonably have been detected.
- Release is confined to the secondary tank and piping.
- Release does not deteriorate the secondary tank and piping.
- Release does not increase the hazard of fire or explosion.

Appendix G Operator's Monitoring Record for Unauthorized Release

In this case, the Operator must record the release on the *Operator's Monitoring Record for Unauthorized Release* (see Appendix G). The record should include:

- The Operator's name and telephone number.
- A list of types, quantities, and concentrations of released hazardous substances.
- A description of the actions taken to control and clean up the release.
- The method and location of disposal of the released hazardous substances (indicating whether a hazardous waste manifest was used).

Appendix H Health and Safety Code, Section 25286(a)

- A description of the actions taken to repair the underground storage tank and to prevent future releases. If the method involves a change as defined in *Health and Safety Code,* Section 25286(a) (see Appendix H), then the WATS Group will prepare the appropriate notifications pursuant to that article.
- A description of how the monitoring system between the primary and secondary tanks was reactivated after replacement or repair of the primary tank.

This record should be submitted to the WATS Group within five (5) working days after the release is detected. The WATS Group must keep the record in the WATS QA file for a minimum of three (3) years.

Reportable release

A *reportable* release is one in which the product is released to the environment or any other hazard to the environment occurs. Reportable is defined in the California Health and Safety Code, Division 20, Chapter 6.7, Section 25295 (see Appendix I). A reportable release would meet *any one* of the following criteria:

Appendix I Health and Safety Code, Section 25295

- Cleanup cannot be performed within 8 hours.
- Release is not confined to the secondary tank and piping.
- Release deteriorates the secondary tank and piping.
- Release increases the hazard of fire or explosion.

In this case, the Operator must immediately notify the Environmental Analyst, who will then notify the WATS Group of the unauthorized release.

A WATS Group staff member must obtain verbal approval from the Division Leader of the Operations and Regulatory Affairs Division before reporting the release to the Alameda County Department of Environmental Health (ACDEH). The county must receive a verbal report of the release within 24 hours. Within five (5) working days after the release is detected, the WATS Group must submit a written report, including a copy of the *Underground Storage Tank Unauthorized Release (Leak)/Contamination Report (Form #HSC 05-4/87)*, to the ACDEH. This report must include other required information in accordance with *23 CCR 2652 (c)* (see Appendix J).

Appendix J 23 CCR 2652(c)

Checklist

For quick reference, a checklist of "Responsibilities for Tanks 611-G1U1, 611-G2U1, 611-D1U1, and 611-O1U1" is provided at the end of this document as Appendix K.

Appendix K Responsibilities

Appendix A

23 CCR 2632(e)

(e) All monitoring programs shall include the following:

(1) A written routine monitoring procedure which establishes:

(A) The frequency of performing the monitoring method;

(B) The methods and equipment to be used for performing the monitoring;

(C) The location(s) where the monitoring will be performed;

(D) The name(s) and title(s) of the person(s) responsible for performing the monitoring and/or maintaining the equipment;

(E) The reporting format;

(F) The preventive maintenance schedule for the monitoring equipment. The maintenance schedule shall be in accordance with the manufacturer's instructions; and

(G) A description of the training needed for the operation of both the tank system and the monitoring equipment.

(2) A response plan which demonstrates, to the satisfaction of the local agency, that any unauthorized release will be removed from the secondary containment system within the time consistent with the ability of the secondary containment system to contain the hazardous substance, but not more than 30 calendar days. The response plan shall include, but is not limited to, the following:

(A) A description of the proposed methods and equipment to be used for removing and properly disposing of any hazardous substances, including the location and availability of the required equipment if not permanently on-site, and an equipment maintenance schedule for the equipment located on-site.

(B) The name(s) and title(s) of the person(s) responsible for authorizing any work necessary under the response plan.

Authority: H&SC 25299.3, 25299.7
Reference: H&SC 25281, 25291
40 CFR 280.43

Appendix B

Operator's Monitoring Report

Operator's Monitoring Report

Submit to WATS Group (L-633) of EPD within five working days after the end of the quarter

Quarterly Period

_____ through _____
Month/Year Month/Year

Weekly Water Level Test

Date	Time	Water in Primary Tank (Inches)	Tester
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____
___/___/___	_____	_____	_____

Equipment Test Log

Once a year, the Operator must schedule maintenance testing on the electronic monitoring equipment. The Operator must attach the test report to this form after the testing is conducted.

	Date	Tester
Maintenance of tank annular-space leak detector (liquid-level indicator):	___/___/___	_____
Maintenance of piping annular-space leak detector (hazardous-substance sensor):	___/___/___	_____

False Alarm Situation (If more than one false alarm occurs during the quarter, attach additional sheets or use the reverse of this form.)

Responder: _____ Date: ___/___/___ Time: _____

Describe what actions were taken to correct the problem:

_____ _____ _____
Operator's name (please print) Operator's signature Date

Call WATS Group for additional forms (423-7417)

Appendix C

Training Documentation

Training Documentation for the Monitoring Program for New Underground Storage Tanks 611-G1U1, 611-G2U1, 611-D1U1, and 611-O1U1

I have read and understand:

1. Owens/Corning Double-Wall Fiberglas® Tanks for Underground Petroleum Storage;
2. Leak Alert System Operational Instruction Manual for the LA-01/LA-02 System; and
3. Monitoring Program for New Underground Storage Tanks 611-G1U1, 611-G2U1, 611-D1U1, and 611-O1U1

Print Name	Signature	Date

I have reviewed the Owens/Corning double wall tank system and it's proper operation with Owens/Corning manufacturer's representative _____ or with LLNL employee _____who was previously trained by an Owens/Corning manufacturer's representative.

Print Name	Signature	Date

Appendix D

23 CCR 2632(c)(2)(C)

(C) For methods of monitoring where the presence of the hazardous substance is not determined directly; for example, where liquid level measurements are used as the basis for determination, the monitoring program shall specify the proposed method(s) for determining the presence or absence of the hazardous substance in the interstitial space if the indirect methods indicate a possible unauthorized release.

Appendix E

Owens/Corning Reservoir Troubleshooting Guide

Troubleshooting Guide

This troubleshooting guide was developed as an aid to determine the nature of a leak. The easiest and least expensive tests are enumerated first.

1.0 Symptom—Liquid level overflows reservoir

TEST	TEST RESULTS	CONCLUSION
1.1 Too many tanks may be connected to one reservoir. Count product tanks and capacity. See Table A for recommended maximums.	Exceeds recommended limit.	Add additional reservoir capacity.
	Tanks do not exceed recommended limit.	Excessive thermal expansion, reduce liquid level to proper full line.

2.0 Symptom—Liquid level too low or lost

TEST	TEST RESULTS	CONCLUSION
2.1 Reservoir and Accessible Connections Refill reservoir with liquid media to 1" above reservoir bottom. Inspect reservoir and aboveground piping connections for leaks. Inspect all accessible belowground tank connections (cavity access fittings and leak simulator valve) for leaks.	Liquid level maintained for 24 hours.	System is OK—Liquid loss caused by trapped air or evaporation. Verify 2 layers or more of hollow spheres are in reservoir. Refill to normal level. Continue to test 2.2
	Liquid level lost within 24 hours	
2.2 Reservoir Belowground Piping Disconnect tank from reservoir piping. Plug reservoir piping near tank. Refill reservoir with liquid media to hydrostatically test.	Liquid level lost within 24 hours	Reservoir piping is leaking. Locate leak, repair and retest.
		Tank is leaking. Continue to test 2.3.
2.3 Monitoring Fittings Remove monitoring fitting plug. Use dipstick or tape measure to check liquid level under fitting.	Liquid level maintained.	
	Liquid level within 1/2" from outer tank top.	Check for potential leak at monitoring fittings (2) at either side of manways.
2.4 Inner or Outer Tank Shell* Continue to refill the reservoir with liquid media—monitor the water level of the inner tank.	Liquid level more than 1/2" lower than outer tank top.	One of the tank shells is breached. Continue to test 2.4.
2.5 Small Inner Tank Leak* Remove product from tank. Using manifold system simultaneously air test (5 PSI) cavity and inner tank for 30 minutes using a gauge with 1/4 or 1/2 pound increments. Reference tank air test procedure in OCF publication 3-PE-12681.	Water level in tank increases.	Inner tank breached. Tank can be repaired in place. Continue to test 2.6.
	Water level in tank stays the same	Go to test 2.5.
	Tank cannot hold air pressure.	Outer tank breached. Tank must be excavated to be repaired. Go to test 2.7.
2.6 Leak Location—Inner Tank* Refill the tank cavity with liquid media. Enter the tank and visually inspect for water leaking into the tank.	Tank holds air pressure.	Inner tank breached. Tank may be repaired in place. Continue to test 2.6.
WARNING: Tank entry is potentially dangerous. Tanks should be entered only by a qualified Technician. Adequate safety procedures and equipment are required.	Liquid level drops. Liquid leaking in.	Locate inner tank repair and retest.
	Liquid level drops. No liquid leaking in.	Leak is in outer tank shell. Tank must be excavated to be repaired. Go to test 2.7.
2.7 Leak Location—Outer Tank* Re-inspect all accessible tank fittings and manways before excavating tank. Excavate area above tank (See OCF pub. 3-PE-9632 for tank removal procedure). Excavate to tank top. Refill cavity with liquid media. Visually inspect tank for leaks as additional backfill is removed (or air test to 5 PSI and soap tank exterior). If air test used, reference tank testing procedure in OCF publication 3-PE-12681.	Liquid level maintained for 24 hours.	Tank is repaired.
	Liquid level drops. Liquid leaking out.	Locate leak, repair, and retest tank.
	Liquid level drops. No liquid leaking out.	Leak is in inner tank. Go back to test 2.6.
	Liquid level maintained for 24 hours.	Tank is repaired.

For additional assistance contact:

Field Repair Supervisor
Toledo, Ohio (419) 248-8196

Installation Manager
Toledo, Ohio (419) 248-7371

*If tank leak is discovered, call the Owens-Corning Field Repair Supervisor to schedule a tank repair. Telephone (419) 248-8196.

Appendix F

Health and Safety Code, Section 25294

Sec. 25294.
Any unauthorized release from the primary containment which the operator is able to clean up within eight hours after the release was detected or should reasonably have been detected, and which does not escape from the secondary containment, does not increase the hazard of fire or explosion, and does not cause any deterioration of the secondary containment of the underground storage tank, shall be recorded on the operator's monitoring reports.

Appendix G

Operator's Monitoring Record for Unauthorized Release

Operator's Monitoring Record for Unauthorized Release*

Submit to WATS Group (L-633) of the EPD within five working days after detection of release

Name: _____ Telephone: _____

Tank No: _____ Piping leak? _____ Tank leak? _____

Type of hazardous substance: _____

Concentration of substance: _____ Quantity released: _____

Date and time release discovered: _____

Date and time release cleanup completed: _____

Actions taken to control and cleanup the release:

Disposal method:

Disposal location (attach a copy of the manifest, if used):

Describe actions taken to repair underground storage tank and to prevent future releases. If changes to the tank system were made, notify WATS Group immediately [per H&S Code, Section 25286(a)].

Monitoring system reactivated or new monitoring system installed?

How is the annular space currently monitored?

*Use this form if any of the following occur:
(1) The contents of the secondary tank leak into the primary tank.
(2) The primary piping leaks.
(3) Overspill into overspill containment.
(4) Overfills of tank.

Call WATS Group for additional forms (423-7417)

Appendix H

Health and Safety Code, Section 25286(a)

25286. (a) An application for a permit to operate an underground storage tank, or for renewal of the permit, shall be made, by the owner, on a standardized form prepared by the board and provided by the local agency and shall be accompanied by the appropriate fee, as specified in Section 25287. As a condition of any permit to operate an underground storage tank, the permittee shall notify the local agency, within the period determined by the local agency, of any changes in the usage of the underground storage tank, including the storage of new hazardous substances, changes in monitoring procedures, and if there has been any unauthorized release from the underground storage tank, as specified in Section 25294 or 25295.

[EPD Note: Very minor repairs, such as replacement of a gasket, need not be reported to the local agency.]

Appendix I

Health and Safety Code, Section 25295

25295. (a) (1) Any unauthorized release which escapes from the secondary containment, or from the primary containment, if no secondary containment exists, increases the hazard of fire or explosion, or causes any deterioration of the secondary containment of the underground tank system shall be reported by the operator to the local agency within 24 hours after the release has been detected or should have been detected. A full written report shall be transmitted by the owner or operator of the underground tank system within five working days of the occurrence of the release. The report shall describe the nature and volume of the unauthorized release, any corrective or remedial actions undertaken, and any further corrective or remedial actions, including investigative actions, which will be needed to clean up the unauthorized release and abate the effects of the release and a time schedule for implementing these actions.

(2) The local agency shall review the permit whenever there has been an unauthorized release or when it determines that the underground tank system is unsafe. In determining whether to modify or terminate the permit, the local agency shall consider the age of the tank, the methods of containment, the methods of monitoring, the feasibility of any required repairs, the concentration of the hazardous substances stored in the tank, the severity of potential unauthorized releases, and the suitability of any other long-term preventive measures which would meet the requirements of this chapter.

(b) In cooperation with the Office of Emergency Services, the board shall submit an annual statewide report by county, to the Legislature, of all unauthorized releases, indicating for each unauthorized release the operator, the hazardous substance, the quantity of the unauthorized release, and the actions taken to abate the problem.

(c) The reporting requirements imposed by this section are in addition to any requirements which may be imposed by Sections 13271 and 13272 of the Water Code.

Appendix J

23 CCR 2652 (c)

(c) Within 5 working days of detecting an unauthorized release, the owner or operator shall submit to the local agency a full written report which, at the minimum, includes all of the following information to the extent that information is known at the time of filing the report:

(1) Operator's name and telephone number;

(2) A list of the types, quantities, and concentrations of hazardous substances released;

(3) The approximate date the unauthorized release occurred;

(4) The date the unauthorized release was discovered;

(5) The date the unauthorized release was stopped;

(6) A description of the actions taken to control and/or stop the release;

(7) A description of the corrective and remedial actions, including investigations which were undertaken and will be conducted to determine the nature, and extent of soil, ground water or surface water contamination due to the release;

(8) The method(s) of cleanup implemented to date, proposed cleanup actions, and a time schedule for implementing the proposed actions.

(9) The method and location of disposal of the released hazardous substance and any contaminated soils or ground water or surface water. Copies of any completed hazardous waste manifests for off-site transport of these media shall be attached to the report;

(10) A description of the proposed method(s) of repair or replacement of the primary and secondary containment. If this involves a change as described in Section 25286 of the Health and Safety Code, then notification pursuant to that section shall be made; and,

(11) A description of any additional actions taken to prevent future releases.

Authority: H&SC 25288.2
Reference: H&SC 25284.4

Appendix K

Responsibilities for Tanks 611-G1U1, 611-G2U1, 611-D1U1, and 611-O1U1

Responsibilities for Tanks 611-G1U1, 611-G2U1, 611-D1U1, and 611-O1U1

Responsible Personnel

Operator (OP)
Environmental Analyst (EA)
Hazardous Waste Management Division (HWM)
Wastewater and Tanks Group (WATS)

Monitoring Procedures

Undergo training and complete the training documentation, which is then attached to the Operator's Monitoring Report. *(OP)*
Perform weekly manual water-level test and record results on Operator's Monitoring Report. *(OP)*
Test electronic monitoring equipment (arrange for repair, if needed) and keep records of the activities on the Operator's Monitoring Report. *(OP)*

Alarm Response

Inspect water level in reservoir box. *(OP)*
Refill reservoir box to determine whether a leak has occurred. *(OP)*
Inform EA of system leak. *(OP)*
Inspect water level in tank, if the reservoir's water level indicates a leak. *(OP)*
Consult Owens/Corning Reservoir Troubleshooting Guide. *(OP)*
Inspect piping sump. *(OP)*
Inform WATS Group of confirmed leak. *(EA)*
Check out alarm system if alarm proves to be false. *(OP)*
Repair alarm system, or call for repair. *(OP)*
Record false alarm response on Operator's Monitoring Report. *(OP)*

Removal Procedures

Authorize start of removal procedures. *(OP/EA)*
Oversee removal operation. *(HWM)*
Oversee contractor's work. *(HWM)*
Pump out product. *(HWM)*
Authorize disposal of product. *(HWM)*
Call manufacturer for tank repairs. *(OP)*

Reporting

Operator's Monitoring Report. *(OP)*
Recordable Release Form. *(OP)*
Reportable Release Form. *(WATS)*